

E. All Renewable Credit Proposal

Submitted by: The Sacramento Municipal Utility District

1. Interpretation of Commission's Goals and Rationale for Strategy

In crafting their decision, the Commission recommended that the following points be considered:

- All utilities and their competitors must bear the cost of public purpose programs in order to avoid a legislated advantage to any single provider or class of providers.
- A target level of renewable generation seems to be the best solution in the short term.
- Renewable resources currently in operation include both utility owned renewables and resources that sell under QF contracts.
- Resource diversity is a valuable attribute and the Commission is committed to its preservation.
- Above market costs of existing renewables might be recovered under the QF transition cost recovery mechanism.
- Either the retail provider or the generator must be required to meet the target level of renewable generation.
- The required level of renewable generation must be specified as energy or capacity.

In preparing the ARC proposal, the following salient points were incorporated to implement the Commission's direction and concerns:

- The renewable resource portfolio standard must apply to all retail sellers, with no exceptions for self-generation or non-traditional providers.
- The requirement to preserve the current level of renewable resource generation at 21% of energy supply will continue the diversity that California currently enjoys.
- In addition to utility owned renewables and QF contracts, some utilities also purchase renewables from out of state suppliers. This adds diversity to the California system and should be rewarded with full credit for these renewable resources. Where current firm contracts for out of state hydroelectric resources exist, credit should be given. Where current firm contracts for other out of state renewables exist, credit should be given. For the purpose of establishing the currency of contracts, the end of 1995 should be used. By only recognizing contracts in continuous use from 1995 until the time of credit, existing resource not used to meet California load will not be allowed to supplant resource that currently add to the diversity of California energy supply.
- While above market costs of QF contracts might be recovered for prior or current year sales using the CTC, forward looking costs are difficult to predict and collect. Capping

above market costs of QF contracts with the CTC would infer that QF contracts would end at the end of the transition period. This could lead to a drastic reduction in the level of renewable diversity that California would enjoy in the future. The ARC proposal allows for the continuation of these resources using a market driven approach. Since the ARC proposal requires that the current level of diversity be continued, current resources could be utilized until they are replaced by more beneficial or less expensive renewable resource options.

- Energy provides the best measure of renewable resource contributions to diversity. Renewable resources are more likely to be used to their fullest potential as energy sources, not as capacity sources. Measuring renewable resource contributions to diversity as capacity distorts their place in utility planning. Energy production requirements will tend to encourage cost effective and efficient use of our renewable options. The ARC proposal uses energy to measure renewable resource requirements.

The ARC proposal provides full credit for the entire spectrum of renewable options with the added benefits that this diversity can deliver. The exclusion of existing hydroelectric resources from the credit market compensates for the possible exclusion of more diverse renewables by hydroelectric resources.

The ARC proposal would not violate any interstate commerce provisions since the location of the renewables is not requisite to inclusion in the program or in establishing eligibility for credit trading. The only requirement used for establishing eligibility of a renewable resource for program inclusion requires that hydroelectric resources must have either supplied energy by continuous contract into the California energy mix prior to December 20, 1995, or be placed in service after December 20, 1995. Hydroelectric resources that were in existence, but not supplying the California market prior to December 20, 1995, would not be eligible for inclusion in the program. This does not refer to where the resources are located, but instead focuses on the Commission's intent to continue the level of diversity currently in place in meeting California's energy needs. Hydroelectric resources not contributing to this diversity in 1995 would not be eligible to participate in the program. An additional requirement for credit trading disallows credit trading of any hydroelectric resource in existence on December 20, 1995. Again, the location of the resource is not required or specified. Only hydroelectric resources placed into service after December 20, 1995, are eligible for credit trading.

2. Program Overview and Description

a. Renewable Portfolio Standard Guidelines

- The Renewable Portfolio Standard should be applied to all market participants serving retail load in California.

- At a minimum, the current level of renewable energy use in California should be preserved.
- Local control and decision making over the amount, type and timing of renewable resources should continue.
- Alternatives for development of renewable resources need to be made available to market participants unwilling or unable to finance and develop renewable resources as part of their resource mix. Alternatives may include payment into a fund to be used by an administrative agency to develop appropriate renewables and establishment of a vigorous market for renewable “credits” to allow trading of renewables among market participants.
- Participation in the Renewable Portfolio Standard should be made mandatory for all market participants through appropriate legislation.

b. Application

The Renewable Portfolio Standard will be applied to all distribution utilities and other retail sellers in California. All retail sellers, including municipal utilities, electrical cooperatives, cities, state agencies, and new direct sales entities should be required to track and report to an appropriate state agency the amount of sales and the sources of generation or purchases necessary to meet their needs.

c. Preservation of Renewable Resources

The existing resource portfolio in California is the result of tremendous effort by the California utilities, the California Public Utilities Commission, the California Energy Commission, and independent energy providers. Based on energy used, produced, bought, and sold in 1994, this diverse resource portfolio contains roughly twenty-one percent (21%) renewables. The estimates have been corrected to approximate an average water year for hydroelectric energy production. We believe that this is an appropriate and sustainable minimum level of renewables for the State of California.

Existing renewable resources currently being used to serve the State’s electric customers should receive full credit under the new Renewable Portfolio Standard. This includes hydroelectric, geothermal, solar, wind, waste-to-energy, and biomass energy sources within the State. These resources have been providing fuel diversity and environmental benefits to California residents. Allowing them to receive full credit will insure that market participants who own such facilities will receive the proper incentive to continue to cultivate and husband such renewable energy sources.

d. Renewable Credits Trading

In the event that a market participant is unable or unwilling to finance and develop renewable resources, alternatives need to be made available to assure their participation. One alternative includes establishment of a renewable trading market. Under this alternative, market participants with renewable energy credits in excess of their needs could make the credits available to other participants in a renewable credits exchange.

An independent entity, such as the proposed power exchange, would facilitate the trading of renewable energy credits and verify that the renewable generation records are accurate. The power exchange or facilitator would issue credits for renewable energy generated. It will sell those credits at a market clearing price to retail entities in need. Renewable generators would receive those revenues in relation to their credits. Since the power exchange will be acting as a market facilitator for much of the bulk power market on a daily basis, facilitating trades for renewables should be a natural extension. Of course, market participants are free to use the exchange or avoid its use and develop specific bilateral contracts.

Such a trading environment will allow local distribution entities to determine the amount, type and timing of renewable resources in its service territory. If a specific distribution company wants to promote a specific type of renewables, it can do so and sell any excess into the credit trading market. Alternatively, a retail entity can purchase all its credits from the market.

All renewables, with the exception of existing hydro power, would be eligible for trading credits, regardless of location. The reason for excluding existing hydroelectric energy resources from such a "renewable credit exchange" is to ensure that a viable and vigorous trading market develops. Including existing hydro energy from plants that were built decades ago, and that have been largely depreciated, in this market would likely distort the incremental price for new renewables and would not send the proper price signal for new investment in renewables to developers and other market participants.

New hydroelectric resources not in existence on December 20, 1995 could be included in this market. Such resources are often developed from improving the efficiency of or upgrading existing resources. Using the existing water more efficiently should be encouraged and allowed to trade in this new market.

e. Example

If a retail seller had sales of 1,000,000 kilowatt hours in one year, they would be required to have generated or purchased 210,000 kilowatt hours using renewable resources to meet the Renewable Portfolio Standard. If they did not meet this requirement, they could purchase credits from a California local distribution utility or other retail seller that had more than 21% of their sales from renewable resources. Credit transactions would not actually result in kilowatt hours delivered to the retail seller needing the credits. Credit trades would result in a

monetary exchange for the right to use the credits. This would preclude the seller from taking credit for the renewable generation in meeting their own Renewable Portfolio Standard requirements.

Renewable credit transactions would be facilitated and regulated by an independent facilitator. Retail sellers and local distribution utilities would be required to meet the Renewable Portfolio Standard on a yearly basis, with on-going reporting and reconciliation to handle hydrological swings. The trading period and the requirement period could be any duration from one month to one year, depending upon the needs of the seller and the buyer. A market clearing price would be determined at the end of each trading period and recorded by the independent facilitator.

f. State Administered Fund

A second alternative would include an option for the market participant to pay into a fund administered by a state agency responsible for developing and financing renewable resources. Since a market clearing price for renewable resource credits may be established under the exchange mechanism, the payment would equal the clearing price from the exchange. Until the exchange becomes active, the price could be set administratively set at the projected lowest incremental cost of new renewables with a true-up to reflect the actual price once the renewable credit exchange is in full swing.

3. Implementation Questions

a. What is the Obligation?

a.1. How is “renewables generation” defined for purposes of qualifying for tradable “renewable energy credits” (REC’s) under this proposed program?

Our proposal qualifies all non-hydro renewables and all hydro built after December of 1995 for credits. The definition of renewables is not given in our proposal, but the definition that SMUD used for our Request for Proposals for Renewables requires an essentially unlimited source of energy replenished by natural and human actions, with the reserves of energy essentially unchanged for the life of the contract.

a.2. What are renewable energy credits? How do they relate to energy portfolio management?

Renewable energy credits are traded to make up for a failure to generate sufficient energy to meet the renewable portfolio standard of 21% (all renewables).

a.3. How are a diversity of renewables encouraged?

Limiting credits to renewables plus new hydro tends to encourage diversity.

a.4. Are currently high-cost technologies or pre-commercial technologies fostered by this program?

The market would tend to move toward the least expensive new projects over time. As technology costs decreased, technologies would earn more market share. RD&D funding could continue the sustained orderly development of more costly or pre-commercial technologies.

a.5. How is renewable self-generation handled? Is self-generated renewable energy eligible for Renewable Energy Credits, or for other means of support?

If the independent system operator is required to monitor all generation and all loads, self generation will be monitored adequately to allow calculation of the renewable resource percentage of that generation source. If the exchange monitors self generation, the exchange could facilitate the purchase of renewable credits if a self generator needed them to comply with the renewable portfolio standard. In this model, the only scenario that would make self-generation exempt from the renewable portfolio standard would be complete disconnection from the system, and even that scenario could result in the requirement to comply if the legislation was worded properly. We would encourage carefully crafted legislation that ensures the renewable portfolio standard is not bypassable in any instance.

Renewable self-generators are not precluded from selling their credits, so this might result in additional benefits from renewable self-generation if the credits were not needed by the self generating entity.

a.6. How are hybrid fossil-fuel/renewable facilities handled?

Fossil fuel is not allowed to receive renewable credit. Hybrids can receive credit for the renewable portion only.

a.7. Does out-of-state generation qualify for Renewable Energy Credits? Is it desirable or necessary to protect in-state California renewable energy generators from out-of-state competition? Is it possible?

All renewables would qualify.

a.8. If hydro is included, how are practical issues associated with hydropower handled?

Year to year fluctuations would result in year to year variance in energy generation. This would have to be reported. A very dry year might result in a distribution utility needing to purchase additional credits from non-hydro renewables. We suggest using the period of record to determine average hydro production and record keeping to ensure long-term compliance. Only new hydroelectric facilities would be eligible for trading.

The option to pay into the renewable development fund would provide an alternative in the event sufficient renewables were not available for purchase.

a.9. How is utility-owned generation of distributed renewables handled? Is it eligible to receive RECs or surcharge funds? Does the proposal permit RECs or surcharge funds to accrue to distributed or other renewable applications that may involve the cross-subsidization of generation with T&D savings, or vice-versa? Does the proposal permit or prohibit distributed or other utility-owned renewable power not sold through the power exchange to receive credits or surcharge funds?

The ARC proposal assumes that all generation is tracked by the exchange, even distributed generation. All renewable generation would qualify, subject to the exclusion of existing hydroelectric resources from credit trading discussed above.

a.10. Are existing and incremental utility-owned renewables included?

Existing utility owned renewables receive credit and can be traded, except existing hydro. Existing hydro receives credit, but cannot be traded.

a.11. What is the level for the requirement? How does this level relate to the level of renewables from 1990 to the present?

The level is set at 21% of energy sales, based on the 1994 statewide level of renewables.

a.12. Does the level of the requirement increase over time, and, if so, at what rate? Describe how, if at all, the compliance obligation adjusts during a transition period.

The level stays at 21% of energy sales. As sales increase, the amount increases.

a.13. Does the proposal include a uniform requirement for all electric providers, including utilities, on a state-wide basis?

All retail sellers of electricity are subject to the renewable portfolio standard.

a.14. What is the time-horizon for the program?

No sunset date was proposed.

a.15. Is the requirement established on a percentage of Megawatts of percentage of Megawatt-hours basis?

The requirement is based on energy sales in kilowatt hours.

a.16. Does the proposal establish floors for certain technology types? What is the rationale for a technology floor, if proposed?

There are no minimums proposed. The local control built into our proposal would allow the various generators to pick the technology best suited to their situation and their locale.

b Where is the Obligation to Comply?

b.1. On whom is the requirement applied? Is the requirement applied only to entities under the Commission's jurisdiction, or is it applied state-wide?

Retail sellers. All retail sellers, selling power in California.

b.2. Are regulated retail providers treated similarly to unregulated retail providers? If not, what are the differences?

No difference.

b.3. What is the penalty for non-compliance? Should this penalty be interpreted as a cost-cap for the program?

Penalties are not addressed specifically, but we do propose a statewide fund for entities not purchasing credits

b.4. How is non-compliance determined? Who is responsible for determining non-compliance and for resolving disputes arising from such a determination?

An independent facilitator or the exchange operator would track compliance.

b.5. What provisions add flexibility in compliance?

The attribute of local control over the resources chosen would tend to facilitate flexibility.

b.6. How does the program ensure that the policy and its costs are non-bypassable, such as the CTC or the Public Goods surcharge?

Legislation would help ensure compliance.

c. How are Renewable Energy Credits Initially Allocated?

c.1. How are Renewable Energy Credits generated from existing renewable facilities (QFs and utility-owned) initially allocated? What impact does the initial allocation have on whether a vigorous market for Renewable Energy Credits, characterized by many buyers and sellers, forms?

Credit would be given to the retail seller that buys the power from the source, through marketers, aggregators, or directly from the IPP, or through the exchange.

c.2. What is the relationship of the allocation of renewable energy credits and the CTC or Public Goods surcharge? Will RECs accrue to technologies, such as on- and off-grid renewables, in a way that would encourage customers to disconnect from the grid and avoid the CTC?

Since the independent system operator would track energy usage because of their need to track ancillary service, only customers totally disconnecting from the system would bypass CTC and renewable standard. Even those customers might be compelled to comply if the legislation were applicable to disconnected customers as well. Customers would not be encouraged to disconnect from the grid by the renewable portfolio standard.

c.3. If customers or ratepayers are initially allocated Renewable Energy Credits, how are the credits administered?

Customers are not allocated credits.

c.4. What, if any, is the relationship between the proposed allocation of Renewable Energy Credits and the status of existing QF contracts?

The contracts that continue would allow the purchaser of energy from the renewable resource contract to get the credit.

c.5. How does the initial allocation deal with the possibility of windfall profits accruing to individual renewables generators, or types of generators?

Not addressed specifically, but the CTC calculation should address this to the extent a utility owns (or contractually receives) the resource.

c.6. Does the proposal potentially increase the value of utility-owned renewable resources in a way that would encourage their divestiture? If so, how should ratepayer interests be addressed?

Not addressed specifically, but the CTC will capture this value and likely lower the overall transition charges to customers and therefore there should be no overall increase in value.

d. How is the Program Administered?

d.1. What agency certifies Renewable Energy Credits?

Not specified.

d.2. What mechanisms are proposed for trading of Renewable Energy Credits? How do the trading mechanisms relate to the initial allocation of Renewable Energy Credits?

Not addressed.

d.3. What mechanisms are proposed for program oversight and mid-course corrections?

Not addressed.

d.4. What agency monitors and enforces compliance with the program, and how is it carried out?

Not specified.

e. Cost-Related Issues

e.1. What are the costs associated with the program, and who pays?

Administrative and oversight costs must be borne by the retail sellers.

e.2. What cost-containment measures, if any, are provided?

The use of a market for renewable credits increases competition and thereby keeps costs down

e.3. If the program utilizes floors for certain technology-types, what are the implications in terms of costs and benefits?

No floors are used.

e.4. Will implementation of the program lead to cost-shifting between consumer groups or regions of the state?

No.

e.5. How is competition within and between renewable technologies encouraged? Between existing renewables facilities and potential new facilities encouraged?

Using an open market.

e.6. What implications, if any, does the proposal have in defining the roles of the LDC and of competitive suppliers of electricity?

The LDC would most likely be the retail seller, responsible for meeting the renewable portfolio standard.

e.7. What is the consistency of this general proposal in relation to cost-related guidance provided by the PUC road map?

The current level of renewables is used as the target for future resource portfolios.

f. How does the Program Fit with Other Aspects of Electric Industry Reform?

f.1. Is the Program compatible with the existence of an Independent System Operator? A Power Exchange? A Direct Access Market? Is the proposal consistent with the Commission's view of the role of the Power Exchange and ISO?

The program is compatible with the existence of an independent system operator, a power exchange, a direct access market, and the Commission's view of their various roles.

f.2. Is the proposal dependent in any way on the Power Exchange or ISO? If so, are there any additional protocols necessary?

The power exchange could facilitate sales but must track the buyer and the seller and the technology if renewable.

f.3. Does the proposal involve conflicts of interest between distribution and competitive retail service? If so, how are they resolved?

No.

f.4. How does the program avoid conflicts of jurisdiction between state and federal levels?

This would be a State mandated program.

f.5. What is the relationship between the Proposal and Direct Access “Green Marketing?”

Green marketing might result in “selling the same kWh twice” since a green marketer would be likely to have excess credits to sell. If someone can sell a kWh as green power they can reduce the cost they would ask for the credits and therefore reduce the cost of tradable renewable credits.

f.6. What is the relationship between the proposal and Performance-Based Ratemaking? Does the proposal place Renewable Energy Credits under PBR, or exclude Renewable Energy Credits from PBR?

Renewable Energy Credits do not require or affect PBR.

f.7. Does the program create any potential market power problems involving the generation market or Renewable Energy Credits?

Our proposal keeps existing hydro out of the trading market to avoid market power issues.

f.8. How does the proposal relate to any consumer protection or consumer education efforts? For example:

a) Rules for New Entrants. Does the proposal entail any licensing requirements for new entrants? Should compliance with the minimum renewables requirement be a condition of selling power at the retail level?

Yes, all retail sellers are required to maintain the 21% renewables standard.

b) Consumer Education. Does the proposal require any consumer education? For example, how does the proposal protect customers from “green marketing” programs where marketers collect twice--once for credit sales and once for “green” power sales, thereby not increasing total green power? This could entail, e.g., amount of renewable energy they are

purchasing that are supports by RECs, or statements regarding price stability of price risks associated with the seller's resource portfolio. Would RECs accrue to utilities from green pricing programs where utilities have unique customer information and access?

The artifact of "selling the same kWh twice" might actually be a benefit, since it would encourage a sustained orderly development of renewables, and increase incentives to build new resources.

f.9. How, if at all, does the proposal relate to RD&D programs funded by the Public Goods Charge?

No relationship.

f.10. How, if at all, does the proposal relate to the energy efficiency programs funded by the Public Goods Charge?

No relationship.

f.11. How does this proposal affect the CEQA compliance work recently initiated by the CPUC?

Unknown.

g. Legislative Requirements

g.1. Can the PUC implement this proposal by itself, or is legislation required? What would the legislative requirement be? What is the status of entities not under PUC jurisdiction in this program?

Legislation is required. All retail sellers would be affected. The legislation should include self generators and disconnected customers.

g.2. What steps are needed to implement the program, and how long would it take? How does this implementation timing relate to the Commission's 1998 implementation goal?

Legislation would be required.

4. Positions of the Parties in Favor/Neutral/Oppose

Comments of the CPUC's Division of Ratepayer Advocates, the Utility Consumers Action Network, and the Independent Power Providers

DRA/UCAN/IPP oppose this proposal because:

1. At 21 %, the proposed portfolio standard is too high. It would have inequitable impacts on some retail providers. This high percentage is due to the inclusion of hydro in the standard in the form of non-tradeable credits.
2. The simultaneous implementation of a credits program, credits exchange and surcharge fund is unnecessarily complex.
3. The proposal does not rule out credits accruing to UDC-owned distributed renewables.

Comments of AWEA/CBEA/GEA/STEAA

OPPOSE. Including hydro in the standard invites "rerouting" of Northwest hydro into the California market, defeating the purpose of the standard—maintaining the existing level and diversity of renewables. The Commerce Clause precludes excluding out-of-state hydro. Compliance with 21% standard is impossible for retail sellers that do not possess substantial hydro resources because hydro credits are not tradable. Thus, credit prices will be too high or retailers will choose to pay the penalty, which would create a pool of funds that must be publicly-administered. Proposal does not address hydro fluctuation, cross-subsidy and other issues. See appendix.

Comments of the Surcharge/Production Credit Proposers

1. Increases the MRPR by 100% (to 21% of total supply) over other proposals: Counts existing hydro in the calculation of an "appropriate and sustainable minimum level of renewables" (roughly 21%). However, proposal includes only new hydro projects along with existing other renewables in definition of renewables eligible for funding. Other renewables account for only about 10% of current electric supply. Hence, the proposed MRPR standard becomes effectively twice the current electric supply level provided by renewables.

2. Creates both an MRPR and a renewables surcharge-type fund: Double funding mechanisms requires doubling the administrative oversight/review burden for the state.
3. Fails to define costs: See Item 1 in AWEA Proposal comments.

Comments of Orange County, Sonoma County, NEO Corporation

We oppose including hydroelectric resources because they are proven renewable technology with a century of experience. Even though this program gives hydro REC's without trading value, it takes REC's out of circulation without stimulating new projects. Also, we oppose this proposal because it continues to subsidize existing facilities. Competition should be market driven through an unencumbered bid process. The idea of having REC trading connected with WEPEX is an interesting concept that should be considered.

Comments of the Union of Concerned Scientists

Oppose.

Pros: Exclusion of hydro avoids subsidization of a mature, fully commercialized technology and problems with annual variability.

Cons: Low 2 cent/kWh non-compliance charge, encourages non-compliance, turning competitive program into administrative program by creating non-compliance fund. Classification of non-compliance charge as business expense instead of a penalty allows for tax write-off, further decreases compliance incentive. Does not support renewables growth since MRPR does not increase. Does not adequately address issue that green marketers could double-dip by collecting RECs and charging more for energy. Will terminate in 2000 if not backed up by legislation.

Comments of Los Angeles Department of Water and Power (LADWP)

DWP favors the continued support of renewable resources, however, it should be made clear to reviewers of this report that SMUD's proposal does not represent the position of all municipal utilities. The level and diversity of California's renewable resource mix should be established by the state legislature and the above-market cost for supporting renewable generation should be uniform throughout the state. The procurement of renewable resources should be the responsibility of some state entity for the state power pool and the cost of compliance should be borne by all customers served by the UDC on a non-bypassable basis.

Comments of CALSEIA/SEIA/CEC/ETDD

OPPOSE

Hydro Variability Creates Unstable Market: California hydro generation may average 10% but annual variability ranges from 5-15% of total consumption. Inclusion of hydro creates requirement that no utility can meet in a dry year, since it means at least 50% short-term increase in non-hydro RECs to cover hydro shortfall. Problem is that REC providers cannot increase supply this quickly, nor for just a short period. To build new renewables requires long-term, stable markets for RECs. Proposed state administered fund would be essential to cover dry year shortfall, but price of payments is unclear and use of funds is unspecified.

Diversity and Emerging Technologies: Low credit prices and substantial inter-year price variability due to hydro make developing and financing any new renewable generation, especially emerging technologies, unlikely.

Comments of the California Integrated Waste Management Board

Oppose: The primary objection to the SMUD proposal is the inclusion of hydro as a eligible renewable resource. As with the NCPA proposal, the inclusion of hydro could force the more classic renewable technologies out of the marketplace.

SMUD mitigates some of the impact of hydro by not allowing the trading of credits that would be based on hydroelectric power.

SMUD has not addressed the issues of enforcement and compliance.

Comments of Don Augenstein

The SMUD proposal presents its strategy with less detail than other proposals. It appears by and large reasonable. As with NCPA, it does not address how the serious questions associated with inclusion of hydro will be resolved.

Comments of SoCAL Gas

OPPOSE - This proposal stresses local control of the amount, type, and timing of renewable resources. Including hydro (adjusted to an average water year) as a renewable resource raises the target percent of kWh from renewables to 21%. Including hydro leads to complications. Hydro swings can be quite large and unpredictable, leading to large purchases of renewable credits in dry years. Excluding existing hydro from the renewables credit market is

discriminatory. Utilities with access to hydro will have a large advantage over utilities that do not have the same access. No mention is made of the cost or length of the program.

Comments of Southern California Edison

This proposal has some positive aspects. It does not have a costly technology band for biomass and it applies statewide to all retail providers, including public utilities.

Inclusion of hydro is problematic. While hydro generation does not contribute to air emissions, there are other environmental impacts to be addressed. Because hydro credits are not tradeable, the high standard of 21% will be expensive, if not impossible, to meet for many retail providers. Finally, including hydro increases complexity associated with the treatment of wet and dry year variations and out-of-state resources.

Comments of SDG&E

Oppose:

- * No cost limitation. Potential cost to SDG&E's ratepayers exceeds \$67 million assuming a 2¢/kWh REC cost.
- * Unequal cost burden on consumers.
- * Primarily subsidizes already-subsidized existing projects instead of new development.
- * Envisions Power Exchange as facilitator of tradable renewable credits, creating more operational complexities for the Exchange.
- * If the Power Exchange is the administrator, both legislation and FERC approval would be required, further complicating and slowing implementation.
- * Administratively burdensome and complex.

Comments of PG&E

PG&E believes that all the RPS proposals may be basically incompatible with the increasingly competitive generation market. Should an RPS proposal nonetheless be imposed, PG&E believes SMUD's proposal deserves further consideration and development. It is designed to recognize the value of hydroelectric generation without discouraging future investment in non-hydro renewable resources. Additionally, SMUD's concept that the ISO could help in imposing this requirement might deserve further thought. While that would certainly be a complex and burdensome extra task for the ISO, the ISO may be in a better position than suppliers to track generation sources hour by hour.